

Thermal Transfer Ribbons: WAX based ink

The Wax based inks are mainly used on applications where the coder is printing directly onto cartons or paper labels. The wax ink has the advantage that it is transferred at relatively low temperatures, and gives a very opaque print. As the ink is transferred from the ribbon onto the substrate, it doesn't dry immediately, but tends to "bleed" slightly. This is an advantage when printing onto substrate with slightly uneven or mottled surfaces (such as card or paper) as when the ink "bleeds", it fills in all the "dips and hollows" of the substrate surface.

WAX based ink Disadvantages

The disadvantage of the wax based ink is that when it is used to print onto flexible packaging such as polyethylene or polypropylene films, it has very low scratch and smudge resistance, unlike the resin and wax/resin mix inks.

Thermal Transfer Ribbons: RESIN based ink

The Resin based inks are mainly used on applications where the coder is printing directly onto flexible films (such as polyethylene or polypropylene) where a high scratch and smudge resistance is requested.

The Resin based inks display a high degree of resistance to mechanical abrasion, and high temperatures (such as those found when the product is passed through an autoclave after it has been coded).

RESIN based ink Disadvantages

The Resin ink has the disadvantage that it is transferred at relatively high temperature, and gives a "grey" print rather than the opaque print of the wax based inks. Because of the need to produce a higher temperature to transfer the resin ink, it can sometimes mean that it can only be used on slower applications or will only produce high quality results when used on a restricted number of highly receptive substrates.

Thermal Transfer Ribbons: WAX-RESIN combined based ink

The Wax-Resin mixes are mainly used on applications where the coder is printing directly onto flexible films (such as polyethylene or polypropylene) where a certain level of scratch and smudge resistance is requested, but also an opaque print is important.

The Wax-Resin mix inks are the most versatile group of inks. They can be used on a broad range of packaging materials. These ribbons are sometimes referred to as semi-permanent ink. In very general terms the Wax/Resin mix inks try to take the best of both worlds displayed by the wax based inks and the resin based inks.

WAX-RESIN combined based ink Disadvantages

The versatility of this ink type means it that at present there are no reported disadvantages.